

REMARKS

Status of the Claims

Claims 1-12 were in the application. Claims 1, 8 and 9 have been amended and claims 2 and 10 to 12 have been canceled. Claims 3 to 6 are pending.

Claim Rejection – 35 USC § 112

Claims 1-12 were rejected under 35 U.S.C. 112, second paragraph. The objectionable language has been deleted from claims 1 and replaced with language that obviates the 112 rejection. The remaining claims 3 to 9 are either directly or dependent on claim 1 and avoid the 112 rejection directed toward claim 1. Claim 11 was canceled thereby obviating the rejection of that claim. Claim 12 was canceled since subject matter was included in amended claim 1.

Claim Rejection – 35 USC § 102

Claims 1, 2, 7, 8 and 10-12 were rejected under 35 U.S.C. 102(b) as being anticipated by George et al. U.S. 4,061,516 A. Claims 2, 10 – 12 have been canceled thereby obviating the rejection of these claims.

George teaches a process of the following steps: (1) printing a design on a carrier; (2) applying an opaque coating; (3) applying an adhesive layer; (4) supplying heat and pressure to cure; (5) removing the carrier; and (6) applying a finish coating to obscure the presence of the patch from detection by touch (see George, col. 3, lines 17-26). Applicants' novel process as set forth in the amended claims does not utilize steps (1), (3) and (6). George can not be held to anticipate applicants amended claims. Further, applicants' novel process gives the requested quality after removal of the backing film with out further finishing as required by George. In particular, see applicants' claim 1 where it is stated "whereby the blemished area of the coated automotive substrate surface is repaired".

In this regard, Claim 1 has been amended and is clearly directed to the repair of automobiles and not furniture. George is directed to the repair of furniture by the use a printed carrier sheet of a "Mylar" polyester film using an adhesive and not to the repair of automobiles to which the amended claims are directed. George, Col. 1, lines 44 – 68, teaches the repair of damaged furniture finishes and does not suggest the repair of automobile finishes.

Further, George uses an adhesive to adhere the printed "Mylar" sheet to the furniture substrate. Applicants do not use an adhesive and in particular disclaim the

use of an adhesive in their claimed process. Applicants use a thermally curable coating composition on the backing layer that adheres to the blemished automotive substrate upon heating with infra red or near infra red radiation emitters that are positioned away from the backing film that has been applied to the blemished automotive substrate. The claims have been amended to the use of infra red or near infra red radiation emitters positioned away from the backing film to clearly avoid contact heating with a roller or the like as taught by George.

The Examiners position that a heated roller of George would act as a radiation emitter is simply untenable. The human body emits a small amount of IR radiation and taking that one step further would mean that holding ones hand over the coated film would be sufficient to cure the film. This is hardly a possibility. If a heated roller was placed 20-70 cm from the surface of the coated film applied to the substrate as, set forth in amended claim 8, nothing would happen and the film would not be cured. A heated roller is not IR emitter as set forth in the amended claims. Further, a heated roller can not be an NIR emitter that emits NIR radiation in the wave length and radiation intensity as set forth in claim 9. The claims provide that the coating on the surface of the substrate is repaired not just exposed to radiation. There must be sufficient amount of radiation either IR or NIR to cause thermal curing of the coating of the backing film to result in an acceptable repair of the coating. Thermal curing sufficient to make a repair as set forth in the amended claims can not occur by placing a heated roller in the vicinity of the substrate as suggested by the Examiner but is not taught or suggested by the reference.

Claim 10 directed to contact heating has been deleted.

In view of the above discussion and the amended claims, the rejection under 35 USC 102(b) based on George can not stand and should be withdrawn.

Claim rejections – 35 USC § 103

In regard to names of joint inventors, the subject matter of the various claims was commonly owned at the time any inventions covered in the application were made.

Claim 3 was rejected under 35 USC 103(a) as being unpatentable over George, supra, in view of Cheng et al U.S. 4,762,674. Cheng does not make up for the deficiencies of George, i.e., does not suggest the elimination of steps (1), (3) and (6) of George's process, suggest that automobiles be repaired instead of furniture ,

eliminate the use of printed "Mylar" film coated with an adhesive which is not used in applicants' process, and uses a heated roller while applicants use IR and NIR radiation emitters. All of these were pointed out above in detail. Further, Cheng is directed to a brazing sleeve having a ceramic flux band and method for applying the same. If ever there was non-analogous art this is certainly the case. What does a process of forming a brazing sleeve with a flux band have to do with the repair of an automotive finish? One skilled in the art would never look to such a reference to solve a problem for the repair of a coating.

George, Col. 2, lines 43-47 is said to teach the use of a clear thermoplastic acrylic lacquer adhesive which is "Krylon". Col. 7, lines 10-13 of Cheng was then cited in the rejection but this states that a sleeve is removed from an oven and sprayed with "Krylon" 1301 which is permitted to dry until the surface becomes tacky. Applicants fail to see the relevance of Cheng in regard to a process for repairing coatings. Both references, George and Cheng, merely disclose "Krylon" but the references are not even remotely related to each other. The references must at least in some way be related for one skilled in the art to apply the teachings of Cheng to George but they are completely unrelated and there is no teaching or suggestion in either reference that the adhesive of Cheng could be used in the unrelated process of George. The rejection based on the combination of George and Cheng should be withdrawn.

Claims 4 and 5 were rejected under 35 U.S.C. 103(a) as unpatentable over George, supra, as applied to claim 1 in further view of Vargo et al. (U.S. 6,428,887 B1). Vargo does not make up for the deficiencies of George which have been clearly pointed out above and apply to this rejection and will not be repeated again. Vargo is not directed to any type of process for repairing automotive surfaces or to George's process of repair of furniture but rather is directed to halopolymer materials that chemically bond to an adhesive substrate and permanent bonds are formed with superior bond strength. Adhesives are used by Vargo that are thermoplastic or thermosetting as pointed out in the rejection but why would one skilled in the art used adhesives for halopolymers that are not used in applicants' process or by the process of George when Vargo is not directed to a repair process nor suggests the use of an adhesive for other than halopolymers? Vargo is non-analogous art. There must be some teaching in Vargo or in George that the Vargo adhesives for

halopolymers would be useful in the process of George but there no such teachings. Furthermore, even if there were such teachings, but there are none, one skilled in the art would not arrive at applicants' novel process since George does not teach applicants' process as has been clearly pointed out above in great detail. The rejection of claims 4 and 5 based on the combination of George and Vargo should be withdrawn and the claims allowed.

Claim 6 was rejected under 35 U.S.C. 103(a) as unpatentable over George, supra, as applied to claim 1 in further view of Seymour (U.S. 2,681,877). Seymour is directed to a supported adhesive strip material wherein one embodiment shows the use of a plastic protective sheet. Seymour does not make up for all of the deficiencies of George which have been pointed out above and the combination of George and Seymour does not show applicants' invention as set forth in the amended claims. Claim 6 is directly dependent on claim 1 which has been amended and is novel and unobvious in view of George. The rejection based on Seymour and George should be withdrawn.

Claim 9 was rejected under 35 U.S.C. 102(b) as anticipated or in the alternative under 35 U.S.C. 103(a) as obvious over George, supra. Claim 9 as amended is dependent on claim 8 which is directly dependent on claim 1 as amended. Claim 8 as amended states that the IR or NIR radiation emitter is positioned 20 to 70 cm from the backing film and the emitters are not in direct contact with the backing film as is the heated roller of George.

The position the Examiner took in the rejection is that the heated roller of George would give out the same NIR radiation as in applicants' process. This is simply incorrect and has no scientific bases. Applicants' claimed process uses radiation emitters that are positioned away from the backing film and in claim 8 the distance is 20 to 70 cm. In contrast, George uses a heated roller in contact with the film and does not teach or suggest that the roller can be removed from the film. It is extremely unlikely that Georges process would work if the roller were not directly engaged with the film.

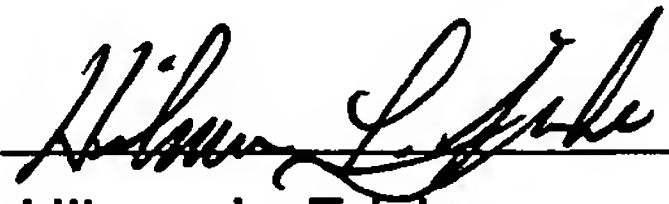
The Examiner has taken the position that this heated roller of George would provide NIR radiation in the range and intensity as set forth in amended claim 9. At best the heated roller of George would provide low intensity scattered radiation that would be insufficient to cure a coating when positioned away from the backing film.

To achieve that level of NIR radiation and intensity as set forth in claim 9, NIR radiation emitters are used and not hot rollers. On page 10, lines 20 – 30 of applicants specification, IR and NIR radiation emitters are described. These radiation emitters operate at a coil filament temperature of 2000 K to 3500 K. Where in George does it state that the roller of George is operated at such an extreme temperature? These are red to white hot metal temperatures. If the roller was heated to such a temperature, everything that the roller touched would be scorched and more likely burned to an unrecognizable crisp. Obviously, this is not the intention of George. For one to assume that a heated roller is the same as a radiation emitter is absurd and unscientific and has no basis in fact. To find that such a heated roller of George could possibly provide the NIR radiation level and intensity as required in claim 9 absent any scientific facts is equally absurd. In view of the above discussion, the rejection of Claim 9 must be withdrawn and the claim allowed.

SUMMARY

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance, and therefore respectfully solicit a Notice of Allowance. In order to expedite disposition of the case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due that is unaccounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

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